

REMARKS

This is in response to the Office Action mailed December 14, 2006. In the Office Action, all claims 1-34 were pending and rejected. With this amendment, independent claims 1, 7 and 20 are amended; claim 6 is canceled and the remaining claims are unchanged in the application.

Section Three of the Office Action indicated that independent claim 20 was objected to as being allegedly unclear. The Office Action asserted that the term "which" allegedly rendered claim 20 unclear. In response, Applicants have amended independent claim 20 to specifically indicate that it is the structure of the intermediate database system that is synchronized with the destination system. Accordingly, Applicants respectfully submit that the alleged clarity issue with respect to claim 20 has now been addressed.

Section Five of the Office Action indicated that independent claims 1 and 20, among others, were rejected under 35 U.S.C. §103(a) as being unpatentable over Warshavsky et al. (U.S. Patent 6,732,095 - hereinafter Warshavsky) in view of Krupa (U.S. Patent 6,915,304).

As a threshold matter, Applicants respectfully note that U.S. Patent 6,732,095 appears to be referred to by the Office Action alternatively as Warshavsky, Earsharsky and Varshavsky. Applicants respectfully believe that this was merely typographical error, and will refer to U.S. Patent 6,732,095 as Warshavsky.

Warshavsky provides a method and apparatus for mapping between XML and relational representations. As set forth in column 3, lines 39-41, "The flexible XML system has a metadata schema that permits the definition of mappings between a relational data representation and XML documents." Further, "Once the mapping definition is created, a software component known as the XML Converter, can be used for automatic conversion between XML documents and relational data." Column 4, lines 13-16. Thus, Warshavsky essentially provides mapping and conversion between relational data and XML documents.

Krupa provides a system and method for converting an XML data structure into a relational database. The system of Krupa provides a method of forming a relational database from an Extensible Markup Language (XML) document. Column 2, lines 54-56. Moreover,

Krupa generally aims to provide the advantage of representing object data as XML in a relational database in such a way that would not require recursive querying while still maintaining the benefits of a general (non-changing) data model that still maintains the structure of individual components. Column 2, lines 46-51.

The rejection of all of the claims set forth in Sections 5-10 of the Office Action relies, at least in part, upon the hypothetical combination of Warshavsky and Krupa. More particularly, the Office Action employs the Warshavsky teaching for providing every component of independent claims 1 and 20 with the exception of the feature "synchronizing a structure of an intermediate database system with the extensible destination system" which, on page 3, the Office Action concedes Warshavsky does not teach. The Office Action turns to the teachings of Krupa to provide this subject matter and then asserts that it would have obvious to a person of ordinary skill in the art at the time the invention was made, "To apply Krupa's teaching of converting or synchronizing between a relational database with an XML data structure to Varshavsky's [SIC] system in order to improve searching/retrieving a large amount of a database on Internet quickly." However, Krupa merely provides a system and method for converting between an XML data structure and a relational database. There is no indication in the teachings of Krupa regarding how to improve searching or retrieving a large amount of "a database on Internet" quickly. Accordingly, this reason is simply not supported by the teachings of Krupa. Further, even if Krupa did focus upon improving searching and retrieval of internet information, which it does not, merely referencing some vague and conclusory advantage, such as improving searching/retrieving would still fail to satisfy the rigors of analysis required under 35 U.S.C. §103.

In order to support a *prima facie* case of obviousness under 35 U.S.C. §103, three requirements must be met. There must have been an objective suggestion or motivation to combine the references, without impermissible hindsight; there must have been a reasonable expectation of success; and the references must have taught or suggested every limitation of an individual claim. See Hodosh v. Block Drug Co., Inc., 229 U.S.P.Q. 182 (Fed. Cir. 1986); In re Vaeck, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991). The Federal Circuit has held that rejecting patents

solely by finding prior art corollaries for the claimed elements would permit an Examiner to use a claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention, which would be "an illogical and inappropriate process by which to determine patentability." In re Rouffet, 149 F.3d 1350, 1357 (Fed. Cir. 1998) (citing Sensonics, Inc. v. Aerosonic Corp., 81 F.3d 1566, 1570, 38 USPQ.2d 1551, 1554 (Fed. Cir. 1996)). Accordingly, the Office Action must provide a reasonable articulation of why one skilled in the art would be motivated to combine the references.

Notwithstanding the important reasons set forth above why combining the teachings of Krupa with those of Warshavsky is improper, Applicants respectfully submit that Krupa, does not in fact, teach the subject matter which the Office Action asserts. Specifically, on Page Three of the Office Action, the Examiner concedes that Warshavsky does not explicitly teach the "synchronizing a structure of an intermediate database system with the extensible destination system." The Office Action then paraphrases a portion of Krupa's abstract which is silent on such synchronization, and then erroneously characterizes Krupa's teaching as "converting or synchronizing between a relational database with an XML data structure." However, Krupa is clearly directed to providing a relational database structure that has a general, non-changing data model. See column 2, line 49. Further, it is noted that any XML data structure can be set forth in the relational table illustrated in FIG. 2. Thus, the XML database structure is transformed into relational database data. The XML structure does not bear upon nor impact the structure of the relational database itself. Accordingly, Applicants respectfully submit that even if the teachings of Warshavsky and Krupa could be combined, the hypothetical combination would still fail to reach the subject matter of independent claims.

Notwithstanding all of the reasons set forth above with respect to the failure on the primary combination upon which the rejections are based, Applicants have amended independent claim 1 to recite the subject matter previously set forth in dependent claim 6, which is now canceled. Accordingly, amended independent claim 1 now recites the further subject matter wherein the intermediate database system includes an entity extension table. Applicants respectfully note that the subject matter of dependent claim 6 was previously rejected under 35

U.S.C. §103(a) as being unpatentable over Warshavsky in view of Krupa and further in view of Nelson (U.S. Patent 6,112,199). In this regard, Page Six of the Office Action asserted that, "Warshavsky does not teach the claimed limitation 'the intermediate database system includes an entity extension table,'" but asserted that Nelson teaches an extension table at column 6, lines 45-50. Column 6, lines 45-50 of Nelson simply discuss a method of table extension known as "relation-valued attributes." The technique employs a "EXTEND" command employed during the execution of a database request to extend database tables. Additional derived data items (to which Nelson is primarily focused) may be included in the table extension. However, "The new data items are conceptual, however, and are not actually added to the original database table." There is no indication that the extending command actually provides anything resembling and entity extension table as set forth in amended independent claim 1. Moreover, the alleged reason provided by the Office Action for combining the teachings of Nelson with those of Warshavsky and Krupa is, "To allow users to extend tables in a relational database for storing data." However, there is no indication in the teachings of Warshavsky that such feature is missing, or even desired. Moreover, there is no indication, set forth by the Office Action, why such an extension would be useful relative to the XML-relational conversion of Warshavsky.

Accordingly, Applicants respectfully submit that amended independent claim 1 is allowable over Warshavsky and Krupa, taken alone or in combination. Moreover, Applicants respectfully submit that dependent claims 2-5 and 7-19 are allowable as well by virtue of their dependency, either directly or indirectly, from allowable amended independent claim 1.

Independent claim 20 was amended to enhance clarity by specifically reciting synchronizing the structure of the intermediate database system with the destination system. Independent claim 20 was not amended to reduce the scope of that claim in any manner whatsoever. Applicants respectfully submit that amended independent claim 20 is allowable over the hypothetical combination of Warshavsky and Krupa for the reasons set forth above with respect to that combination. Further, Applicants respectfully submit that amended independent claim 20 includes an important feature that is neither taught nor suggested by the hypothetical combination. Specifically, independent claim 20 sets forth migrating the source data from the

intermediate database system to the destination system in accordance with migration overhead information. Page Six of the Office Action asserted that Warshavsky teaches, "wherein migrating the source data from the intermediate database system to the extensible destination system is done according to migration overhead information." citing column 5, lines 10-20 and column 4, lines 40-57. Given that Page Three of the Office Action has indicated that the feature of migrating source data from the intermediate database system to the extensible destination system is met by the transferring of relational data in an XML document over a network, it must follow then that such "transferring" of Warshavsky must be in accordance with migration overhead information as set forth in column 5, lines 10-24 and column 4, lines 40-57. However, column 5, lines 10-20 merely discuss the definition of a "component" and the definition of a "field" relative to the mapping provided by mapping definition 114. Further, column 4, lines 40-57 speak of transferring data between a first computer system and second computer system, but do not indicate that such transfer is according to anything, let alone anything resembling migration overhead information. Accordingly, Applicants respectfully submit that amended independent claim 20 is allowable over Warshavsky and Krupa, taken alone or in combination. Additionally, Applicants respectfully submit that dependent claims 21-32 are allowable as well by virtue of their dependency, either directly or indirectly, from amended independent claim 20.

Section Eleven of the Office Action indicated that independent claims 1 and 20, among others, were rejected under 35 U.S.C. §103(a) as being unpatentable over Warshavsky in view of Mullins et al. (U.S. Patent Publication 2004/0123048 A1 - hereinafter Mullins). The Office Action uses the Mullins reference in exactly the same manner as it uses the Krupa reference discussed above. Further, the reason given by the Office Action for combining the teachings of Mullins with Warshavsky is the same as that set forth above with respect to the Warshavsky/Krupa combination. Accordingly, Applicants respectfully submit that the *prima facie* case of obviousness under 35 U.S.C. §103 has not been set forth for the same reasons set forth above with respect to the motivation statement provided for the Warshavsky/Krupa combination.

Mullins provides a dynamic object-driven database manipulation and mapping system. With respect to the Mullins reference, Page Thirteen of the Office Action asserted, "Mullins teaches synchronizing both a relational database structure and an object model (paragraph [0007])." Paragraph 0007 provides, "Typically a system that utilizes both a relational data source and an object programming environment involves coordinating, updating and synchronizing both a relational database structure and an object model or models that represent relationships between objects and data, objects and objects, objects and metadata, and the like." However, referring back to the Warshavsky reference, it is synchronization between the structure of the intermediate database system and the destination system that is lacking in Warshavsky and must be provided in some additional reference. Simply indicating a paragraph in Mullins that discusses synchronizing both a relational database structure and an object model does not meet the limitation set forth in independent claims 1 and 20. If the strained constructions of both Warshavsky and Mullins were to truly support a rejection under 35 U.S.C. §103, substantially more would be required than merely indicating a paragraph and asserting that the combination is supported since it would allegedly "improve searching/retrieving a large amount of a database on Internet quickly." Accordingly, Applicants respectfully submit that amended independent claims 1 and 20 are allowable over Warshavsky and Mullins. Additionally, Applicants respectfully submit that dependent claims 2-5, 7-19, and 21-34 are allowable as well by virtue of their dependency, either directly or indirectly, from allowable independent claims.

In conclusion, Applicants respectfully submit that the entire application is now in condition for allowance. Reconsideration and favorable action are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 

Christopher R. Christenson, Reg. No. 42,413

900 Second Avenue South, Suite 1400

Minneapolis, Minnesota 55402-3319

Phone: (612) 334-3222 Fax: (612) 334-3312

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